SONORAN DESERT NATIONAL MONUMENT AND PHOENIX SOUTH PRELIMINARY DESIRED FUTURE CONDITIONS

| SONORAN DESERT NATIONAL MONUMENT | PHOENIX SOUTH | |
|---|---|--|
| PRELIMINARY DESIRED FUTURE CONDITIONS | PRELIMINARY DESIRED FUTURE CONDITIONS | |
| • Plant community in excellent condition with all of its vegetative | Plant community in good or better condition with all of the | |
| components at or near the ecological site potential (See Natural | vegetative components expected for the ecological site present | |
| Communities Condition Table below) | and sustainable | |
| Watershed in excellent condition (see Watershed Condition | Watershed in good condition or better | |
| Table below) | | |

Desired Future Conditions (DFCs) describe the condition of the vegetation and watershed across a broad area or landscape. DFCs will not describe the condition of each individual location in an area, but are designed to provide overall management direction. Across an area, a variety of conditions, from poor to excellent, exist. For example, a vehicle route within the Sonoran Desert National Monument would not be considered in excellent condition. However, the Monument as a whole would be managed to achieve excellent condition.

The Sonoran Desert National Monument Preliminary Desired Future Conditions are in the blue column (the first column, titled Excellent) for Natural Community and Watershed Conditions.

The Phoenix South Preliminary Desired Future Conditions are in the yellow column (the 2nd column, titled Good) for both Natural Community and Watershed Conditions.

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| TYPICAL NATURAL COMMUNITY CONDITION CHARACTERISTICS | | | | |
|---|--|--|---|--|
| Excellent | Good | Fair | Poor | |
| 1. Complex and robust native natural communities that are at or near their potential for the site. | 1. Complexity and robustness of native natural communities are somewhat reduced from their potential for the site. | 1. Complexity and robustness of native natural communities are further and considerably reduced from their potential for the site. | 1. Complexity and robustness of native natural communities are further and considerably is reduced to a minimum for the site. | |
| 2. Biological diversity is at or near the site potential, including: Genetic diversity in individual species populations Numbers of species present (ie., species richness) Plant community structural diversity and densities Variety of ecosystems across the landscape Interactions among ecosystems across diverse landscape | 2. One or more components of biological diversity are somewhat disrupted and/or reduced such that site potential for biological diversity is not achieved. | 2. One or more components of biological diversity are further disrupted such that natural communities are reduced to an earlier successional stage, far short of the site potential. | 2. Multiple components of biological diversity are disrupted such that natural communities are reduced to the earliest successional stage; biological diversity is at a minimum for the site. | |
| 3. Ecological processes—such as hydrologic cycling, nutrient and energy flows, predator-prey or parasitic relationships, species migrations, and competitive effects—remain at or near the site potential. | 3. One or more ecological processes at the site are somewhat disrupted and/or reduced from their normal potential. | 3. Ecological processes at the site further disrupted and reduced from their normal potential. | 3. Ecological processes are disrupted and reduced to a minimum for the site. | |
| 4. Invasive species, if present, are not disruptive of natural ecological processes (Invasive species, weeds, are uncommon and do not support wildfires, prevent other species from growing or cause other problems). | 4. Invasive species are more common, and may begin affecting ecological processes. (Weed inadvertently carried by animals, hikers, vehicles, and the wind become established in small numbers in the area, and may begin competing with native species). | 4. Invasive species may be abundant and may have a substantial affect on the natural community through fire, competition, or other forces. | 4. Invasive species may dominate in some areas, and these likely are only the short-lived annuals. | |
| 5. Community is resilient and sustainable. | 5. Community remains sustainable, but resiliency is reduced. | 5. Sustainability of community in an advance successional stage is uncertain; community is vulnerable to degradation. | 5. Community is sustainable only in its least complex and earliest successional stage. | |

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| TYPICAL WATERSHED CONDITION CHARACTERISTICS | | | | | |
|---|---|---|---|--|--|
| Excellent | Good | Fair | Poor | | |
| Drainage patterns provide soil | Drainage patterns provide some | Drainage patterns have no effect | Drainage patterns impede delivery | | |
| moisture to existing or desired plant | soil moisture to existing or desired | on delivery of soil moisture to | of soil moisture to existing or desired | | |
| communities. | plant communities. | existing or desired plant communities. | plant communities. | | |
| 2. Channel formation in dry washes | 2. Channel formation in dry washes | 2. Channel formation in dry washes | 2. Channel formation in dry washes | | |
| follows natural runoff processes. | predominantly follows natural runoff | alternates between natural processes | predominantly follows roads, tracks, | | |
| | processes. | and capture by roads, tracks, or other | or other streambed disturbances. | | |
| | | streambed disturbances. | | | |
| 3. Natural ephemeral watering | 3. Wildlife access to natural | 3. Natural ephemeral watering | 3. No natural ephemeral watering | | |
| locations remain accessible to wildlife | ephemeral watering locations may be | locations are difficult for wildlife to | locations remain. | | |
| and responsive to the natural | somewhat limited but these locations | access and disconnected from natural | | | |
| rainfall/runoff processes. | remain responsive to natural | rainfall/runoff processes compared to | | | |
| | rainfall/runoff processes. | similar watersheds. | | | |
| 4. Erosion and sediment deposition | 4. Erosion and sediment deposition | 4. Erosion and sediment deposition | 4. Erosion and sediment deposition | | |
| do not degrade plant community or | are impacting plant community or | have degraded plant community or | prevent establishment of desired plant | | |
| ephemeral water sources for wildlife. | ephemeral water sources for wildlife. | ephemeral water sources for wildlife. | communities or eliminate ephemeral | | |
| | | | water sources for wildlife. | | |
| 5. Infiltration of surface water in soils | 5. Infiltration of surface water in soils | 5. Surface water does not infiltrate in | 5. Surface water infiltration in soils is | | |
| is sufficient to support existing or | is sufficient to partially support | soils at a rate needed to support | severely impeded. | | |
| desired plant communities. | existing or desired plant communities. | existing or desired plant communities. | | | |
| 6. Flood frequencies, durations, and | 6. Flood frequencies, durations, and | 6. Flood frequencies, durations, and | 6. Flood frequencies, durations, and | | |
| magnitudes are maintained at levels | magnitudes remain similar to levels | magnitudes depart from levels that | magnitudes occur at levels that don't | | |
| that support existing or desired plant | that support existing or desired plant | support existing or desired plant | effectively support existing or desired | | |
| communities. | communities. | communities. | plant communities. | | |